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Battleplan for an Unqualified Opinion:

How Does the DoD FM Certification Program Help Fix the DoD's Audit Problem?

by

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Abstract

The Department of Defense (DoD) currently does not have the means to produce auditable financial statements. With new budget constraints being implemented across the government, there is more pressure on the financial community to improve the overall performance and accountability with tax payer dollars. While there are several aspects that factor into the reliability of the statements, the education and experience of the workforce is a major contributor to the ability to produce auditable financial statements.

The DoD Financial Management (FM) Certification Program is a course-based certification that ensures financial managers have the proper training and background to perform their duties. Following the Evaluation methodology, this paper evaluates the FM certification program and compares it to other test based certifications to determine if the program enhances the knowledge of the FM workforce and improves financial reporting. This paper found while the FM Certification program does introduce new information to FM, there are areas the program does not address training shortfalls and cannot ensure more reliable financial statements. The paper recommends altering the program to address issues related to auditing and the financial management systems to meet the requirements needed for an unqualified audit opinion.

Introduction to Auditability and the DoD FM Certification Program

"The taxpayer, has a right to have the assurance that those to whom they have entrusted the custody of their funds are exercising good faith along with intelligence in the fulfillment of such duties" ¹

W. H. Welcker, 1936

The current perception of the federal government and the public's opinion on government agencies ability to perform financial management is at an all-time low.² The federal government has the responsibility to be the best stewards of taxpayer dollars. The Department of Defense (DoD) is an agency within the government that is highly scrutinized for how funds are executed. The fiscal year (FY) 2016 budget for the DoD is requested at over \$585 billion, which totals over half of the entire federal budget.³ The instability in the world puts demands on the military and defense services that are not going to lessen requirements for funding anytime soon. The country is dealing with an increasing deficit that is putting pressure on the executive and legislative branches to reduce the amount of spending by the US government and to become more efficient in balancing the budget. The DoD is a major target of reduced spending and calls for accountability.

One of the most impactful pieces of legislation passed to curb spending and increase efficiency was the Budget Control Act of 2011. This Act, also known as sequestration, was a bill specifically enacted to reduce the federal deficit by roughly \$1.2 trillion over a ten year period.⁴ This unprecedented law had enormous ramifications on the future budgets for the DoD. The Act created a new operating environment that now requires greater scrutiny on the financial data of the DoD and ensures fraud, waste and abuse is at a minimum. With several large cuts looming, the DoD is also forced account where its funds are in the event a cut is imposed within a specific

program. With the financial statements currently unauditable, it is nearly impossible to determine the true impact of a cut on a program.

In terms of financial management, one of the main tools used to ensure accountability and efficiency is the financial statement audit. An audit of the financial statements is important to the DoD because audits provide assurance to the taxpayers the government is in compliance with all accounting laws and regulations. From a business perspective, an unqualified audit opinion is imperative to attract investors to buy the company's stock and raise capital for operations. It is a true picture of the health of an organization. When a less than favorable audit opinion is given, it puts a company at risk because investors do not have faith a company is managing its funds properly. There are internal control weaknesses that create an environment for fraud, waste and abuse. These weaknesses are a large portion of what drives the inefficiencies in government spending. The DoD has numerous weaknesses that prevent auditable financial statements.

The DoD operates in a very different manner than publicly traded companies since it is not operating for profit. The DoD's goal is to operate within the means the appropriated taxpayer money provides. In order to address the DoD's issues with auditability, the DoD created the Financial Improvement and Audit Readiness (FIAR) guidance to help serve as a roadmap for the DoD to become audit ready. This legislation is the driver for the DoD to become auditable.

Taxpayer dollars are appropriated through Congress which issues funds for very specific purposes for the DoD to execute. Auditability, in respect to DoD funds, ensures the money issued to the various services is spent where Congress stated it should be. The desired end state is the DoD received the products or services it bought. With a budget over \$500 billion and

countless programs and computer systems, auditability has been a major challenge for the DoD to achieve.

The DoD has difficulties tracking funds for a complete audit trail. None of the four main DoD services have obtained a clean audit opinion, while a few organizations within the DoD have. The Army Corps of Engineers, Defense Finance and Accounting Service and the DoD Inspector General office have been able to produce clean financial statements. What this shows is the DoD can get to a clean audit opinion, but it will take an enormous effort to get there. It is the matter of a solid roadmap that needs to be in place to achieve the goals of auditability.

Background

It has been long understood the federal government has consistently had difficulties in managing the billions of dollars appropriated each year. In particular the DoD has had a great deal of scrutiny on its ability to properly account for its funding. The problem itself has not been entirely ignored recently. Several attempts have been made to try and require the DoD to better manage and account for its funding. One of the more encompassing pieces of legislation that has been passed was the Chief Financial Officers (CFO) Act of 1990.

The CFO Act was one of the first attempts to reign in the inefficiencies and shortcomings of the current financial management process in the DoD. This act provided the Office of Management and Budget the authority to take over direction of federal financial management, modernize the FM systems, and strengthen the financial reporting for the federal government. This step was extremely important in that it put an emphasis on improving the current state of financial management within the federal government. One of the primary points of the CFO Act was to require audited financial statements. An auditable financial statement, from a public

accounting perspective, is a key identifier than an organization has a capable workforce and reliable financial systems to ensure the proper accounting of all financial transactions. The DoD has lacked the confidence of the public in regards to accounting and finance nearly its entire existence. The systems were not designed to produce auditable statements.

To address this lack of confidence, the federal government has been constantly working on improving the financial data for the organization. One of the primary pieces of legislation that has kick started a tangible initiative was the National Defense Authorization Act of 2012. This law provided the Secretary of Defense the authority to mandate professional certification and credentialing standards for members of the DoD financial workforce. This legislation went further than previous ones, because it specifically addressed the need for identifying workforce needs from an education and expertise standpoint. The act enforces the DoD FM Certification as a *requirement* for any member of the services (military or civilian) to obtain this certification. This is a major deviation from almost any other financial industry. In most cases the need for a certification is a desired qualification for employees, but for the DoD this certification is now a requirement for employment. Those not obtaining the DoD FM certification can be released from their position.

There are over 53,000 military and civilian members of the financial management community in the DoD. 12 While 78% of this number is represented by civilian personnel, it is important to note roughly 45% of these employees possess less than a Bachelor's degree. 13 This statistic shows the federal government does have an issue in attracting credentialed finance and accounting people and retaining them in the government. 14 This is not to say the current workforce is incapable of doing the job, but when comparing the FM workforce to the public

sector, the statistics (above) show the appearance of a low representation of certified employees. The number of people applying for governmental accounting professional positions tend to have non-governmental experience along with little or no formal education in governmental accounting. The majority of finance and accounting people holding certifications are employed outside of the government in public or private accounting positions.

What the DoD FM Certification program is trying to address is filling the gap of training, certification and education of the DoD FM workforce to enhance and improve the quality of the financial data the department produce. The program is working to make sure the workforce has the knowledge and qualifications, through certification, to perform the job up to the level of expectations the public has for it. These improvements should lead to better decision making and representation of the DoD's finances to the American taxpayers.

Criteria for Evaluating FM Certification Program

Across various professions, a number of certifications used to identify individuals who have either mastered or have the expertise to perform a job. These certifications normally require an amount of classwork and extra training allowing the person to demonstrate these competencies through a test or course-based certification. What the certification also does is allow those inside and outside of the profession to identify individuals who are capable and trusted to produce reliable information. In an interview with a local human resource director, when recruiting potential employees, certifications are looked at as career enhancing differentiators regardless if the certification is test based or course-based. The presence of a certification can give an employer the ability to validate the skills and expertise a prospective employee possesses.

Once those skills are validated with a certification, it can also improve an outsider's viewpoint of a company's workforce. Many companies track the education and certifications of their workforce to help promote the quality of the products and services delivered. By having a highly trained workforce, it can generate a higher public opinion of a company. The government operates the same way. The government works towards attracting and retaining a highly trained and capable workforce to help instill the public's confidence their taxes are being used in the most efficient way possible. The more members of the workforce that possess a higher education or certification, the more faith the public will have in the government's ability to do its job.

When analyzing the capability of a workforce, the level of education and presence of certifications are two of the more common characteristics that are looked for when bringing employees into the workforce. In a study when determining the most desirable candidates for employment in non-public positions, a degree in accounting was the most desirable over other common degrees in information systems, finance and business management. The study also looked at certifications in addition to formal education and the desired focus of the certifications. The Certified Public Accountant (CPA) ranked on top as the most desired certification for non-public accountants to possess. What was interesting in the study was a Certified Internal Auditor and Certified Managerial Accountant were the next two certifications that fit what a non-public organization would seek for its employees to have. This is an important fact the accounting process in the federal government tends to follow managerial accounting processes and there is also an extremely great need to become an auditable organization. Certifications should be targeted to the type of work an organization does.

When evaluating the FM certification program it is important to look at the criteria used to determine how a member of the DoD FM workforce can become certified through this

program. This paper will examine the competencies used to determine how a financial manager can become certified. Second, the extent of the hours required for the competencies will be looked at to determine if it is sufficient for a mastering or expert level understanding of the competency. Finally, every certification requires a significant amount of continuing education (CPE) in order to maintain the certification. The amount of hours of required to maintain the certification will be evaluated against other recognized certifications to ensure the requirements are adequate.

Evaluation Criteria for the DoD FM Certification Program

When evaluating the DoD certification program, the various requirements for the program must be looked at to determine how well it meets the expertise in financial management. Just as a university should be accredited, any certification program should be stringent enough to ensure some level of exclusivity for those who obtain a certification. The certification should demonstrate the workforce is capable of providing decision support for leadership and having the analytical skills to execute funds efficiently and correctly in a constrained environment. ¹⁹ In order to demonstrate that capability the certification should cover a variety of topics, have enough training time to enable learning and also have a way to keep people up to date on current methods and information in their field. Since the FM certification program is course-based (as opposed to test based) it will take into account all of the previous training classes and courses a member has done over their career. ²⁰

Competency Based

The certification program focuses on different competencies that are essential to master across various fields in DoD financial management. In DoD FM work, the aspects of the job can change within the various skills required for a particular position. Job responsibilities are

managed in a way so the separation of duties are maintained to avoid fraud, waste and abuse. To ensure the workforce is properly trained, it is essential to map training specific to the various positions in the FM field. One of the key principles in workforce planning is making sure the skills and competencies are identified that will contribute to the strategic program goals.²¹ Once these requirements are identified, the training can be tailored to ensure the basic fundamentals are covered.

While the private sector can view the fundamentals of finance and accounting as one in the same, these are two separate fields in the DoD. For example, when referring to a budget analyst in the Air Force, the position would require somewhat different skills than an accountant in the Air Force. To address this unique issue, the DoD FM Certification program has primary and alternate tracks that enable the program to allow each employee to focus the curriculum for the job they are doing. The different tracks are in accounting, finance, budget and military and civilian pay.

The DoD has identified 23 competencies important for financial managers to know depending on a particular position. ²² What these 23 competencies cover are the breadth of knowledge and skills that can ensure an employee can successfully perform their job. Depending on which primary and alternate track an employee selects for certification, determines which of the 23 competencies would apply directly to them. This is important so the knowledge base is tailored to the specific job duties for each employee and prevents investing time and money in training not in the regular job functions. So someone not performing military and civilian pay, would not be required to take training in that competency. By addressing these areas of knowledge, it should reduce the amount of funds control weaknesses identified in Government Accountability Office (GAO) studies. The chart below lays out each of the 23 identified core

competencies for FM work across the DoD. Six of the competencies are audit related and not normally required for most DoD FM positions.

Figure 1: 23 DoD Financial Management Enterprise Wide Competencies

DoD FM Enterprise Wide Competencies							
 Accounting Analysis 	■ Fundamentals & Operations of Accounting						
 Accounting Concepts, Policies & Principles 	■ Fundamentals & Operations of Budget						
Advanced Financial Management	■ Fundamentals & Operations of Finance						
 Audit Concepts Policies & Principles 	■ Fundamentals & Operations of Military & Civilian Pay						
■ Budget Concepts, Policies & Principles	■ Payroll Concepts, Policies & Principles						
■ Budget Execution	■ Budget Formulation, Justification & Presentation						
Commercial Pay Concepts, Policies & Principles	 Decision Support 						
■ Financial Concepts, Policies and Principles	■ Financial Management Analysis						
■ Financial Management Systems							
The Six Competencies E	The Six Competencies Below are Related to Audit						
Audit Planning & Management	■ Audit Reporting						
Financial Reporting	■ Decision Support – Audit Execution						
■ Financial Management & Reporting Analysis	■ Financial Stewardship						

Source:DoD Financial Management Certification Program Handbook ²³

The focus of each enterprise-wide competency should reduce the internal control weaknesses of management oversight, proper authorizations, recording and reporting of transactions and ensuring the proper use of systems within federal standards.²⁴ What each of these competencies will cover, applies to any of the financial management classified positions in the DoD. While each person is not required to know all 23, they can select a primary track that tailors the requirements to their area of expertise. The competencies can then be evaluated to determine they cover enough information to validate expertise on the subject.

The way the program is structured, increases the required level of knowledge for the competencies as a financial manager progress up to higher ranks of management. ²⁵ There are three levels of certification; one, two and three. One is for entry level employees who are more than likely new to the career field and would not require as in depth knowledge of financial management. Level two is more the intermediate and journeyman level of financial managers. These would be the mid-level employees and officers/enlisted. Level three are the top level supervisors and management for the organization. The level three are the most experienced employees and involved in the strategic vision and decision making for an organization.

Figure 2: Certification Levels and Grades/Ranks

Certification Level	Grade/Rank (Officer/Enlisted)			
airchild Resea				
Certification Level 1	GS 1-9/2 nd Lt-1 ST Lt/ E1-E5			
Certification Level 2	GS 10-13/Capt-Maj/E6-E7			
Certification Level 3	GS 14-SES/Lt Col & Up/E8-E9			

Source:DoD Financial Management Certification Program Handbook²⁶

It is important the leadership of the organization have the higher level of certification to match their responsibility level. Setting these tiers ensures the appropriate level of expertise is obtained to help justify the position and grade of the employee. While the levels are very specific, the grade/rank requirements for each is flexible. Some smaller organizations may have a lower graded person (e.g. Maj or GS-13) supervising a smaller number of personnel that are level two which would require a supervisor to obtain a level three.

Hour Requirements

The second component to evaluate in the program is the hourly requirements for each of the competencies. This certification is course-based so there is a minimum amount of course time required in order to determine the depth of knowledge added for any particular subject.

Since the competencies are aligned to particular positions (e.g. accounting or finance), the hours are determined based on the tracks (positions) chosen by an individual.

Just as the competency requirements increase with the level of certification, the hourly requirements do as well. Levels one, two and three are based off of 46, 71, and 81 course hours, respectively.²⁷ This gradual increase in the requirement fits with the overall trend of the program to expect more out of the higher graded/ranked employees. As the responsibilities increase, so should the amount of time they have put in to hone the craft of their trade.

In reference to a primary track, the course hour requirements are much greater than a secondary track or the other required courses. For instance, if a member has chosen accounting as their primary track, there would be a higher requirement of hours in the accounting competencies. The secondary tracks would require less hours due to this not being the main function, but still relevant to the position. The secondary track is an important piece of the certification in that it demonstrates wider knowledge in relation to subjects in DoD financial management. The certification hours build more depth to the knowledge base of an employee.

CPE Requirements

According to the American Institute of Certified Public Accountants (AICPA), a CPE is an integral part of the lifelong learning required to provide competent service to the public that enables a certified person to maintain and improve their professional competence. These CPE credits are normally earned in 50 minute segments of training. Like the other two evaluation criteria above, the requirements for CPEs increases with the level of certification. Continuing education is a requirement for almost all certifications that ensures continual learning and staying informed on current issues.

The DoD FM certification program addresses the requirements for CPEs in the same manner most previous certifications do. Once certified, the CPEs must be earned every two years to maintain the certification. Levels one through three must earn 40, 60, or 80 CPE hours respectively in the two year period.²⁹ An employee can earn the CPEs during or outside of their normal daily activities. This can be done with on-line training, official course work, and/or training classes related to job function. Failure to maintain the CPEs could result in losing the certification and revalidating the training.

CPE requirements are in place to address the changes that occur in the financial management environment over time. New laws and regulations are implemented on a regular basis so it is imperative financial managers stay informed on new information in the profession. One great aspect of the program is CPEs earned for other financial certifications (discussed below) can apply to the FM certification as well. There is no need to double up on the amount of training required to hold multiple certifications. The FM Certification program utilizes CPEs to ensure the financial managers never stop learning throughout their career.

Methodology

The Evaluation method will be used to examine the program and determine how effective it is in improving the auditability of financial statements and how it compares to other established certifications. These other certifications can be used as benchmarks to determine how well the DoD FM certification program is designed to validate workforce competencies. All the certifications can be broken down into the evaluation criteria above; the content of each certification, the time required for the certification and the actions needed to maintain the certification status after the award. Since the other certifications are widely recognized in the

financial community, they can be analyzed on how obtaining a certification in this field can enhance the capability and knowledge of the workforce.

Comparable Certifications

There are two ways certifications can be obtained. As discussed already, the DoD FM

Certification program is a course-based certification. This type of certification is based on
completing training courses or classes to build up the knowledge base of an individual. The most
common certification in this respect would be an undergraduate degree or Master's program
showing the cumulative education of an individual meeting requirements for graduation. The
other type is a test based certification that requires an individual to pass a series of tests to prove
a mastering of a field of study. These are the more common types of certifications in the
financial management field. There are a variety test based financial certifications, but this paper
will focus on a handful more closely relate to finance and accounting for the government. The
Certified Public Accountant, Managerial Account, Internal Auditor, and Defense Financial
Manger are the four test based certifications that will be used to evaluate against the DoD FM
certification. A degree or Master's program will be used to evaluate a course-based certification
against the DoD FM Certification.

By using these recognized and established programs, this paper will determine how effective the DoD FM certification program meets the needs of financial improvement in the DoD. Once these determinations are made, it should also produce recommendations to fill gaps or identify improvements to the program.

Certified Public Accountant (CPA)

The Certified Public Accounting certifications is the most recognized accounting certification in the world. The CPA is administered by the American Institute of Certified Public

Accountants (AICPA) and the certification is recognized globally for its prestige because of the certification process and the strict educational and testing requirements.³⁰ The educational requirements for the exam limit only those who have completed 150 hours of college level coursework to even sit for the exam. This consideration was an emphasis on formal education over informal experience, and the desire for the recognition of accounting as a profession at least as demanding as law, engineering and architecture.³¹ Once the education requirement is met, the examination is broken up into four areas of study that are taken separately. The four sections consist of Audit and Attestation (AUD), Business Environment and Concepts (BEC), Financial Accounting and Reporting (FAR) and Regulation (REG) consisting of 60-90 questions each and 3-6 task oriented problems each which make up the 14 hours required for testing.³²

The reasoning for the "prestige" is due to the examination process being extremely difficult and the amount of knowledge required to pass the exam is extensive. The below table shows the passing rates for the exam for 2015³³:

Figure 3: CPA Exam Pass Rates

Section	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Cumulative
AUD	44.56%	49.21%	48.20%	46.74%	47.28%
BEC	53.41%	57.55%	59.22%	55.00%	56.48%
FAR	44.14%	48.90%	50.35%	42.84%	46.75%
REG	47.94%	50.99%	51.33%	47.15%	49.43%

Source: AICPA.ORG

With an overall success rate of around 50%, that proves the requirements for this certification are one of the more exclusive certifications one can obtain. The purposes of this certification are to prove the utmost expertise in the four areas of testing and being able to apply the analytic ability to produce accurate and valid accounting information. Mr. Mark Keeley, a

partner at PricewaterhouseCoopers with 27 years of audit experience, testified to Congress "one of the best ways to improve audit readiness and improve financial management would be to add CPAs with audit experience to the DoD. CPA's ability to test controls and identify problems is key to improving financial management."³⁴ The CPA is a tool used to identify finance and accounting personnel that possess the analytical skills to contribute to proper accounting practices leading to unqualified audit opinions.

Evaluation of CPA and DoD FM Certification

Table 1: CPA vs. DoD FM Certification

Certification	Content	Hours Required	СРЕ	Improve Knowledge	Improve Auditability
СРА	Audit, Environment, Financial, Regulation	-150 Cr.hrs -14 hrs -80 ?'s/4 prob per test (avg)	120/ 3yrs	Yes	Yes
DoD FM Cert.	23 Competencies	46-81 hours	40-80/ 2 yrs	Yes	Undetermined

When evaluating the CPA exam against FM Certification requirements, it is apparent where the DoD program tries to imitate the CPA. Both programs utilize breaking the certification down into substantive topics so those parts are focused on a direct skillset needed to perform the job. The CPA exam is much more in depth and balanced for the topics in order to prove expertise in all aspects of public accounting. Since the CPA exam is test based it makes it more difficult to compare the hourly requirements of the two certifications. The CPA is broken into four parts that average 3 ½ hours of testing each. The amount of study time for each one of these sections can vary from one individual to the next so it could be difficult to measure this for comparison to the course time required. Last, for CPE credit the AICPA requires 120 hours of CPE approved credits for every three years. This is quite similar to the FM Certification where a level three

certified member is required 80 hours every two years. The CPA exam is currently one of the most recognized certifications in the financial management field of study, which serves as the top benchmark for the DoD FM Certification to try and mimic. The time requirements before (study and testing) and after testing (CPE) do have some similarities to where each certification is comparable to one another.

Certified Managerial Accountant (CMA)

The CMA certification is another program similar to the CPA, but has a focus on managerial accounting practices and regulations. One of the main differentiators in this certification is it is less focused on the public accounting aspects of financial reporting. The CMA is concerned more on the efficiency and organizational performance through accounting practices and analysis. This certification is maintained by the Institute of Management Accountants (IMA) who set the standards for this exam. The CMA exam is broken up into two parts; Financial Reporting, Planning, Performance and Control with the second part of the exam concentrating in Financial Decision Making. The CMA exam is also a difficult certification to achieve. The pass rates for the calendar year 2015 were Part 1 – Financial Reporting, Planning, Performance, and Control 36% and Part 2 – Financial Decision Making 55%. Any person being able to achieve the CMA certification is demonstrating an expert understanding of the managerial accounting concepts and processes.

Where the CMA can be utilized is, the government is constantly working towards process improvement and uncovering efficiencies which is a prime focus of the CMA. Where this key comes in, is in the ability to work with new systems designed to improve financial management. A certified person in this respect would be able to identify problems in the reporting process and be able to suggest improvements in the process to better account for costs. The financial

reporting and process control competencies portions of the tests are two of the main mechanisms in creating an environment which presents auditable information for an organization.

Evaluation of the CMA and DoD FM Certification

Table 2: CMA vs. DoD FM Certification

Certification	Content	Hours Required	CPE	Improve Knowledge	Improve Auditability
CMA	Fin. Reporting, Decision Making/100?'s and two essays	-8 hrs testing -200 ?'s -4 Essays	30/yr	Yes	Yes
DoD FM	23	46-81 hours	40-80/2	Yes	Undetermined
Cert.	Competencies		yrs		

Since the CMA approaches the accounting aspect from a managerial accountant, it relates to the DoD FM Certification in a slightly different way. With a concentration on the processes of accounting and decision making, these topics are more in line with the competencies identified in the DoD FM program. A certified person would have an enhanced ability to analyze the processes and suggest improvements to the system. This is a much needed skill for the DoD and their process improvement initiatives for internal controls. The FM certification program appears to mimic this by looking at the process level of finance and accounting to ensure expertise in this aspect of financial management work. The hourly requirements for the CMA are slightly less since it only consists of two parts as opposed to the various competencies of the DoD FM certification.

With the CMA being more focused on a specific area of accounting, the two four hour exams still provide a similar hourly requirement for certification and would be a similar comparison to the DoD FM Certification. The CPE requirement is also very similar between the two programs. The CMA requirement requires 30 CPE hours per year which is equivalent to the

average of a level two and level three certified DoD financial manager.³⁸ An interesting point for the CPEs is the CMA requires two of the thirty CPE hours be focused on ethics. This is similar to the DoD FM certification as ethics are identified as one of the main required topics for all members seeking certification. It is an appropriate aspect to focus on when ensuring the proper processes are being used for reporting and decision making of accounting data.

There are some similarities when comparing the CMA to FM certification. The topics have a more narrow focus with the CMA that take a deeper dive into the managerial accounting processes much like the various tracks the DoD certification has. The hourly requirements for testing are closer in line with obtaining and maintaining the certification. A common factor where the CMA and DoD FM Certification align is the noted emphasis on the ethics portion of the exam and CPE requirement coinciding. An important part of the audit process is the integrity of the individuals working in the financial processes.

Certified Internal Auditor (CIA)

The Certified Internal Auditor is a certification that is tied directly to the specific job of an auditor. It is designed as the only globally accepted certification for auditors.³⁹ The organization that administers this certification is the Institute of Internal Auditors (IIA). The exam is given in three parts; Internal Audit Basics- 125 questions/2.5 hours, Internal Audit Practice- 100 questions/2 hours, and Internal Audit Knowledge Elements-100 questions/2 Hours.⁴⁰ Interestingly, the pass rates are not readily available information for this certification.

One of the qualifications in order to sit for the exam is to have a degree from an institute of higher learning.⁴¹ Alternative to requiring a cumulative total of course hours to qualify for the examination, there is a formal requirement to complete a specific level of education to take the

exam. This is another example of how a certification can use requirements to differentiate itself from others.

There are additional specialty certifications to complement the CIA. Three examples are the Certification in Self-Assessment, Certified Government Auditing Professional and Certified Financial Services Auditor. ⁴² The government auditing specialty could contribute greatly on working with government audits. The IIA highlights this specialty exam as being designed for auditors working at all levels in the federal, state and local government areas that can prepare someone to deal with majors issues in the field. ⁴³ When trying to address the audit needs of an organization, a CIA and its additional specialty certifications can serve to improve the understanding of the audit process and how to maintain auditability.

Evaluation of CIA and DoD FM Certification

Table 3: CIA vs. DoD FM Certification

Certification	Content	Hours	CPE	Improve	Improve
		Required		Knowledge	Auditability
CIA	Basics,	-Degree	20-40/	Yes	Yes
	Practice,	-6.5 hrs	yr		
	Elements	-325 ?'s			
DoD FM	23	46-81 hours	40-80/2	Yes	Undetermined
Cert.	Competencies		yrs		

When evaluating the CIA against the DoD FM Certification, the main item that stands out is the competency focus of the CIA. While the DoD certification does address audit readiness, it only does so in a three hour requirement of the certification. The content of the CIA is dedicated to the audit profession and what goes into becoming an expert on the internal audit process. This certification focuses less on the day to day transactions and reporting requirements that the previous certifications do on along with the DoD Certification. It looks at the total process. The hourly requirements for the test do hold with the general amount of hours required

to obtain the certification. The CPE hourly requirements are also in line with the DoD FM Certification by having an annual requirement to maintain the certification. One caveat is, the status of the auditor determines the hours required. Practicing auditors (performing internal audits) are required 40 CPE annually while non-practicing has the mandate dropped to 20. ⁴⁴ This is unique in it addresses how active an auditor is in their job to determine the requirement.

Certified Defense Financial Manager (CDFM)

The Certified Defense Financial Manager certification is another test based certification, but it is the one that resembles the DoD FM certification the closest. The CDFM is a program specifically created by the American Society of Military Comptrollers (ACMC) for financial managers in the DoD. The structure of this program was designed in a similar fashion to the previous certifications in it is broken up into specific sections; Resource Management Environment, Budget and Cost Analysis, and Accounting and Finance, where the member is tested on 12 core competencies. A financial manager must pass three 80 question, two hour exams to become certified in defense financial management.

An online survey on the ASMC website showed out of 2,000 votes, 57% obtained their CDFM, 31% have no certification, while less than 7% have a CPA.⁴⁷ Overall the percentage of DoD financial managers would be slightly overstated due to the fact many visitors to the ASMC site would have or be working towards the CDFM, but it does demonstrate the lack of other professional certifications within the DoD community.

Maintaining CPEs is a requirement to continue to be certified. Eighty hours are required every two years with no less than 20 earned in each year. 48 This is a precaution to prevent a member from "cramming CPEs" in the last portion of each two year period. It is another subtle

way to keep the learning process going throughout each year. However, there is no specific requirement tailored to audit and getting audit ready.

Evaluation of CDFM and DoD FM Certification

Table 4: CDFM vs. DoD FM Certification

Certification	Content	Hours Required	CPE	Improve Knowledge	Improve Auditability
CDFM	Resource Environment, Accounting, Budget	-3 Tests -80?'s/test -2 hours/test	40/2yrs	Yes	No
DoD FM Cert.	23 Competencies	46-81 hours	40-80/ 2yrs	Yes	Undetermined

The CDFM and DoD FM Certification are two very similar recognitions due to their focus on DoD finance and accounting. The main differentiator between the two is the manner in which the certification is obtained. The CDFM being a test based certification while the DoD FM Certification is course-based. Many of the competencies overlap between the two. In fact, the training study course for the CDFM actually fulfills some of the competency requirements for the DoD FM certification. When evaluating the content of the DoD FM Certification, it would appear it is fully covered in the CDFM. When comparing both the testing hours and CPE hours for the CDFM and the requirements of the DoD FM program, they are very much in line with every other certification discussed above. These two certifications mirror each other in several respects and could be considered equals in the DoD FM profession.

Primary and Secondary Education

Using primary and secondary education requirements is one of the few instances of a course-based certification that can be applied in the DoD career field. As stated earlier, it is

estimated the less than 50% of the DoD FM workforce possess a Bachelor's degree of any kind. Normally, the course hour requirement for a Bachelor's degree in accounting would need a passing grade in 128 credit hours within the accounting curriculum. Within the curriculum, various coursework would need to be taken in a number of accounting, finance and business courses to provide an overall knowledge base in finance and accounting. This sort of requirement would mirror the competency requirement of any test based certification across the various job concentrations. As the courses are passed, the hours are accumulated to meet the degree program.

The main difference is there is no continuing education requirement once the degree is earned. It would be up to the individual to continue either a graduate program or other area of study to continue the learning process in their profession. Last, depending on the focus of the degree program, there may be only one course or none that focus on auditing. It would greatly depend on the course of study if the degree program contributes in any way towards building knowledge to become audit ready.

Primary Education Evaluated Against the DoD FM Certification

Since this is the only comparable course-based certification, the similarities and differences can be looked at in a various ways. First the completion of each program results in a number of course hours completed to prove the mastering of a topic. While a degree program has a higher amount of required hours, a majority of the difference can be contributed to electives and core classes. The DoD FM Certification program has a more focused goal on the specific competencies that apply to a particular job series. This is a positive aspect for the DoD FM certification in the focused area of study saves time and money compared to a university degree program. The accountant job series in the DoD is one that does have a positive education requirement of 24 hours in accounting courses to be eligible for a 510 job series. This is one of

the few financial positions with an education requirement to be eligible to apply. This requirement is short of a full degree program, but it will at least identify some of the skill sets needed to practice as a government accountant.

Evaluation Results

The following table contains a summary of each of the certifications which have been evaluated. One of the main points to note are how each of these certifications contribute to increasing the knowledge base of the workforce and how obtaining a certification can enhance the quality of the financial statements for audit purposes.

Table 5: Summary of Certification Evaluations

Table 5. Bullilla	ry of Certification Evan		-			
Summary of Evaluations						
Certification	Content	Hours Required	CPE	Improve Knowledge	Improve Auditability	
DoD FM Cert.	23 Competencies	46-81 hours	40-80/ 2 yrs	Yes	Undetermined	
CPA	Audit, Environment, Financial, Regulation	-150 Cr.hrs -14 hrs -80 ?'s/4 prob/test(avg)	120/ 3yrs	Yes	Yes	
CMA	Fin Reporting and Fin Decision Making /100?'s and two essays	-8 hrs testing -200 ?'s -4 Essays	30/yr	Yes	Yes	
CIA	Basics, Practice, Elements	-Degree -6.5 hrs -325 ?'s	20-40/ yr	Yes	Yes	
CDFM	Resource Environment, Accounting, Budget	-3 Tests -80?'s/test -2 hours/test	40/2yrs	Yes	No	
Formal Ed.	Degree Program	128 Credit HRs (avg)	0	Yes	No	

When addressing the evaluation criteria of all certifications, one would expect in obtaining a new certification would result in validating a person's expertise, knowledge and

capability in their profession. By increasing the knowledge base, the overall competency of the workforce should improve as a result of proper training. Second, once proper training has taken place the output from an individual should improve their performance and produce reliable information from a finance and accounting perspective.

How are the Workforce Competencies Improved?

The most importance assets in financial management is the people. The GAO states it is also the employer's job to ensure the workforce has the critical skills and competencies that can lead an organization into the future. ⁴⁹ These skills and competencies are included in the 23 competencies identified in the FM Certification program. The DoD believes when analyzing an employee's training records, it will be able to identify any gaps in the knowledge base and be able to provide the adequate training to fill those gaps. That training provides the knowledge necessary to do the job. If no gaps exist, the employee provides the proof of previous training to ensure the competency has been achieved.

In a recent study, it was important to note accounting certifications are no longer the single cure for financial reporting. The marketplace now requires multifunctioning and demonstration of expertise in other closely related disciplines. Accountants and financial managers must be proficient in not only finance and accounting but in the information technology aspect as well. The DoD FM Certification is working on addressing part of the FM systems aspect to go along with the primary competencies. The program has a single requirement designed to fill that gap. With an evolving set of FM systems being released by the DoD, the program is set up to ensure there is current training applied for these systems and the member can stay up to date on how to operate them.

The time required to obtain various certifications differed across each case, but it was quite apparent each one of the programs required an ample amount of time for testing, study and coursework to determine a mastering of the information presented in each program. This was the area where there was the most consistency among the programs in relation to the DoD FM Certification. Financial managers put in the necessary hours of study to improve the fundamental knowledge of finance and accounting in the DoD.

One aspect where this program may fall short is the fact grandfathering in previous training can result in some instances of no new training required to obtain certification. Some DoD members who have years of experience may have taken numerous training courses that would qualify and result in fulfilling all the competencies. In these specific cases, no new knowledge would be added for those individuals since previous classwork and training "check the boxes" for certification. This shortcoming is partially addressed in the CPE requirement ensuring the continuous learning aspect, but there is no guarantee the member will focus CPEs on audit, system or new information needs. The CPE aspect in each program is the one mechanism to keep the workforce's knowledge from falling behind and becoming irrelevant to new regulations and technologies. As long as the certified member chooses CPE opportunities with the correct focus they are able to build on their existing knowledge base.

How are the Financial Statements More Reliable/Accurate?

One of the bigger questions yet to be answered is if the DoD FM Certification program will be able to make enough improvements to the workforce to improve financial statement reporting for an audit. A GAO report in 2014 pointed out the DoD FM Certification program with its three levels of certification that cover all grades/ranks of the FM workforce, when implemented effectively could help address training, supervision and management oversights

which contributed to some of the material weaknesses that prevent a clean audit opinion. ⁵¹ While the program may not solve every contributing factor preventing a clean audit, if done right it can address multiple levels feeding into the financial data. In the GAO report, GAO-14-94 it references internal control weaknesses in 282 instances out of 1,006 (658 weaknesses are transaction based). ⁵² The twenty five percent of the problems associated with poor reporting standards/control weaknesses can be corrected through the fundamentals gained through the DoD FM Certification program. Those improvements should steer the department closer to a clean audit. Another side effect from this report is workforce process improvements would also reduce the amount of transaction control problems (roughly 65%) that are hindering the financial reporting process. By correcting many of the weaknesses on the front end of the transaction cycle, makes the financial statement data more auditable.

In contrast to the GAO report, in two interviews with current auditors for the Air Force, they tend to disagree on the effectiveness of the program on improving the auditability of the government. When asked if the program contributed to better financial data and auditable statements, it was a resounding "no" from both auditors.⁵³ The reasoning behind this, was they felt the program was only addressing one single aspect of the problem. The auditors were looking past FM workforce and into the various pieces that go into the total picture. Other issues in relation to system limitations, non-FM positions not accounting for financial data properly and lack of accountability were major roadblocks to a clean audit.⁵⁴ One final point both made in the interviews was a lack of focus on the audit process may be a key shortcoming of the program. Many people (including financial managers) do not understand what is required from an audit and thus may not take into consideration the auditability of their actions when performing their duties. Many times an organization under audit will react to requests from auditors with question

similar to "why do you need this, or why is that required?" Becoming educated on the audit process and what audits require would present a better understanding of how one's actions affect the big picture of an organization's financial data.

Recommendations

One of the more apparent shortfalls of the program was identified when looking at this program through the eyes of an auditor. An auditor must analyze the entire process and identify any potential weaknesses in the internal control process that could be subject to fraud, waste and abuse. James Leath, an auditor with over 25 years of experience, suggested increasing the audit competency in the program would be a good start. ⁵⁶ By increasing the workforce's knowledge on audit requirements and what effects internal controls have on an entire system, it would benefit every level of financial reporting.

Many times it is not a finance person who initiates a financial transaction/obligation for the government. It can be a mechanic (non-financial position) ordering a part or a logistics person reporting assets that starts a financial requirement. There is almost no financial experience for these people who are on the front line generating financial obligations. The audit process is a top to bottom endeavor where all parties should be educated on the basics of documentation and accountability. The more finance people know of the entire audit process, the more influence they can have at all levels (financial and non-financial) to contribute to good financial data. One way to solve this shortcoming would be to require 3-6 hours of the required CPEs to be on auditability or FIAR topics. By focusing a set number of hours related to FIAR, this would be similar to the ethics requirements for CPEs to the CMA and ensure certified individuals understand this important piece of the bigger picture. The knowledge gained in the

audit process can make FM personnel more aware of internal control weaknesses and the effect on auditability of DoD finances.

Another aspect that could be improved is the depth of the financial systems competency through CPEs. Much like audit concepts and requirements, FM systems are one of the major hurdles in the auditability of the financial statements. While the DoD FM Certification cannot fix the systems, the expertise and knowledge of the workforce on the total process of financial management work will help in leveraging the systems to make the data within them more accurate. The Comptroller of the Army weighed in and stated "While modern, auditable systems are critical to the Army's success, we must have properly trained and qualified personnel operating the systems and executing our business in an auditable manner." A certified financial manager should be able to operate the systems properly and be prepared to operate future systems so the data continues to be accurate for decision making purposes. By requiring CPE hours in FM systems, it would enable certified members to stay proficient on the systems processing the data and understand how the systems operate from a functional standpoint.

The DoD FM Certification program was established with the ultimate intent of demonstrating the workforce is qualified to be good stewards of taxpayer dollars. It is also intended to expand the knowledge base of the workforce in order to ensure proper accounting and finance work to help leadership with decision making. As the program is currently structured it helps with a portion of these goals. With the recommended improvements stated above and in combination with the current system improvement initiatives, the DoD FM Certification program can help the DoD in its quest for producing auditable financial statements. Without the recommended changes, it may still fall short of the department's goals for accurate finance and accounting data. By improving the credentials for DoD financial managers, it gives the taxpayer

assurances of the government using appropriated funds in the most effective and efficient manner possible.

Conclusion

Prior to the DoD FM Certification program, there were many training courses available to defense financial managers, but there was no framework that emphasized certain courses and to ensure proper training occurs at each career point. The GAO also reported programs did not address many of the needs for audit readiness. The DoD FM Certification was created to organize and bridge the gap of training and experience to improve and enhance the expertise of the workforce. When evaluating the FM Certification program against other recognized financial certifications, it does contain aspects in line with other respected certifications. The structure of the DoD program is tailored in a similar fashion as the more recognized certifications in the public financial management community. However, accounting and finance in the DoD is unique in content and structure compared to the public sector. The sheer size and complexities of the current system pose an enormous set of challenges members of the DoD FM community must deal with on a day to day basis. These complexities are keeping the DoD from achieving financial statement accountability.

It is recognized by several leaders in the DoD community that people are the path to the clean audit opinion. Dr. Jamie Morin stated "One consistent lesson from government organizations that have secured a clean audit is engaging people is key to success. We agree." ⁶⁰ The DoD FM Certification serves as a very cost effective way for members to gain fundamental knowledge and obtain a certification specific to their job duties. Several on line training courses are available for all levels. While there is a time requirement to put together past training and coursework accomplishments, the program enables members for become certified with minimal

cost compared to other certification exams and corresponding preparatory classes. The certification can provide employees with the ability to demonstrate competency in specific areas in their profession.⁶¹

While it is cost effective training, it does have some areas that can be improved. If the improvements noted in the recommendation section are implemented, the DoD FM Certification program can help fix the DoD's audit problem. Without these changes, there will be gaps in addressing audit related issues. Making improvements to the workforce can have a multiplier effect on the aspects of auditability in the DoD. The goal of the FM Certification program is to make capable financial managers represent the department and account for funds properly and that is what can be accomplished.

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¹ Quoted in Sinclair, Renee. "A Study of the Scarcity of Qualified Applicants for Governmental Accounting Positions" 19 January 2015. (Welcker, W. H. (1934, March). The public accountant and local government accounting. Accounting Review, 9(1), 53-57. Retrieved from http://aaahq.org/pubs/acctrev.htm- P37)

² Scully, Jeff. "Gallup Poll: Americans Name Federal Government as #1 Problem for 2nd Straight Year" Generation Opportunity https://generationopportunity.org/articles/2016/01/07/gallup-poll-americans-name-federal-government-as-1-problem-for-2nd-straight-year/ 7 January 2016.

³ Under Secretary of Defense (Comptroller) "Budget Request Overview" http://comptroller.defense.gov/Portals/45/documents/defbudget/fy2016/fy2016_Budget_Request_Overview_Book.pdf

⁴ Public Law 112-25, The Budget Control Act of 2011. Congressional Research Service, Library of Congress. 5 January 2011.

⁵ American Institute of Certified Public Accountants (AICPA) "Why Audit Quality is Important for Auditees." 4 January 2016.

http://www.aicpa.org/InterestAreas/GovernmentalAuditQuality/Resources/AuditeeResourceCenter/Pages/WhyAuditQualityisImportantforAuditees.aspx

⁶ Office of the Under Secretary of Defense (Comptroller) Chief Financial Office. Financial Improvement and Audit Readiness Guidance. April 2015.

⁷ Government Accountability Office, GAO-10-1059T "Financial Management Improvement and Audit Readiness Efforts Continue to Evolve" 29 Sept 2010

⁸ Business Executives for National Security "Achieving Audit Readiness in the DoD: A Cautionary Tale from the Air Force" http://www.bens.org/document.doc?id=251

⁹ Public Law 101-576, "CFO Act 1990". Congressional Research Service, Library of Congress. November 1990

¹⁰ Public Law 101-576, "CFO Act 1990". Congressional Research Service, Library of Congress. November 1990.

- ¹¹ Office of the Under Secretary of Defense (Comptroller). DoD Financial Management Certification Program Handbook. May 2014
- ¹² Office of the Under Secretary of Defense (Comptroller). DoD Financial Management Workforce Development. http://www.asmconline.org/wp-content/uploads/2015/06/87-Clay.pdf
- ¹³ Office of the Under Secretary of Defense (Comptroller). DoD Financial Management Workforce Development. http://www.asmconline.org/wp-content/uploads/2015/06/87-Clay.pdf
- ¹⁴ Sinclair, Renee. "A Study of the Scarcity of Qualified Applicants for Governmental Accounting Positions" 19 January 2015.
- ¹⁵ Sinclair, Renee. "A Study of the Scarcity of Qualified Applicants for Governmental Accounting Positions" 19 January 2015.
- ¹⁶ Girthoffer, Genelle (Lymann Richie Corporation- HR Director), Interview by Author, 12/31/15.
- ¹⁷ Cory, Suzanne and Thomas Huttenhoff. "Perspectives of non-public accounting education and certifications: An exploratory investigation." *Journal of Finance and Accountancy*
- ¹⁸ Cory, Suzanne and Thomas Huttenhoff. "Perspectives of non-public accounting education and certifications: An exploratory investigation." Journal of Finance and Accountancy. May 2011.
- ¹⁹ Office of the Under Secretary of Defense (Comptroller). DoD Financial Management Certification Program Handbook. May 2014
- ²⁰ Defense Financial and Accounting Service. "DoD Financial Management Certification Whitepaper". <u>www.dfas.mil/dms/dfas/careers/pdf/DoDFMCertificationProgram.pdf</u>
- ²¹ Government Accountability Office, GAO-14-576T "DoD Financial Management: Effect of Continuing Weaknesses on Management and Operations and Status for Key Challenges" 13 May 2014.
- ²² Office of the Under Secretary of Defense (Comptroller). DoD Financial Management Certification Program Handbook. May 2014
- ²³ Office of the Under Secretary of Defense (Comptroller). DoD Financial Management Certification Program Handbook. May 2014
- ²⁴ Government Accountability Office, GAO-14-576T "DoD Financial Management: Effect of Continuing Weaknesses on Management and Operations and Status for Key Challenges" 13 May 2014.
- ²⁵ Office of the Under Secretary of Defense (Comptroller). DoD Financial Management Certification Program Handbook. May 2014
- ²⁶ Office of the Under Secretary of Defense (Comptroller). DoD Financial Management Certification Program Handbook. May 2014
- ²⁷ Office of the Under Secretary of Defense (Comptroller). DoD Financial Management Certification Program Handbook, May 2014
- ²⁸ American Institute of Certified Public Accountants "Statement on Standard for Continuing Professional Education Program Credits"http://www.aicpa.org/Advocacy/State/DownloadableDocuments/AICPA-NASBA-Final-CPE-Standards.pdf
- ²⁹ Office of the Under Secretary of Defense (Comptroller). DoD Financial Management Certification Program Handbook
- ³⁰ Boyd, David T, Sanithia Boyd. "A Primer for Accounting Certification: Complete Analysis of the Process with a Listing of Sources" *American Journal of Business Education*. October 2009.
- ³¹ National Association of State Boards of Accountancy. "120/150 Hours Draft as of November 2008". https://www.nasba.org/blog/2008/11/04/110408-120150-hour-draft-as-of-november-2008/18 January 2016.
- ³² American Institute of Certified Public Accountants. "Uniform CPA Examination Purpose and Structure" http://www.aicpa.org/BecomeACPA/CPAExam/ExamOverview/PurposeandStructure/Pages/default.aspx 18 January 2016.
- ³³ American Institute of Certified Public Accountants. "Uniform CPA Examination Passing Rates" http://www.aicpa.org/BecomeACPA/CPAExam/PsychometricsandScoring/PassingRates/DownloadableDocuments/PassRates2015.pdf 18 January 2016.
- ³⁴ Keeley, Mark. Department of Defense Audit Impediments and Audit Readiness Testimony. 17 November 2011
- ³⁵ American Institute of Certified Public Accountants. "Uniform CPA Examination FAQs Content, Structure, and Delivery"
- http://www.aicpa.org/BecomeACPA/CPAExam/ForCandidates/FAQ/Pages/computer faqs 2.aspx 18 January 2016.

- ³⁶ National Association of State Boards of Accountancy. "CMA Brochure."
- http://www.imanet.org/docs/default-source/cma-lib/cma brochure 2015.pdf?sfvrsn=2 18 January 2016.
- ³⁷ Institute of Managerial Accountants. "CMA Examination. Summary Pass Rates 2015."
- http://www.imanet.org/docs/default-source/cma-lib/2014-09 pass rates 1-5-16 (worldwide).pdf?sfvrsn=2
- ³⁸ Institute of Managerial Accountants. "CMA Brochure." http://www.imanet.org/docs/default-source/cma-lib/cma_brochure_2015.pdf?sfvrsn=2 18 January 2016.
- ³⁹ Institute of Internal Auditors "Six Steps to Certification" https://na.theiia.org/certification/new/Pages/Six-Steps-to-Certification.aspx 19 January 2016.
- ⁴⁰ Institute of Internal Auditors. "Certified Internal Auditor Exam Syllabus".
- https://na.theiia.org/certification/cia-certification/Pages/Exam-Syllabus.aspx 25 Jan 2016.
- ⁴¹ Boyd, David T, Sanithia Boyd. "A Primer for Accounting Certification: Complete Analysis of the Process with a Listing of Sources" *American Journal of Business Education*. October 2009.
- ⁴² Boyd, David T, Sanithia Boyd. "A Primer for Accounting Certification: Complete Analysis of the Process with a Listing of Sources" American Journal of Business Education. October 2009.
- ⁴³ Institute of Internal Auditors. "CGAP Certification" https://na.theiia.org/certification/cgap-certification/Pages/CGAP-Certification.aspx 19 January 2016
- ⁴⁴ Institute of Internal Auditors. Global Certification Department. "Administrative Directive Number 4" CPE and CPD Requirements for All Certifications and Qualification Programs. August 2015.
- https://na.theiia.org/certification/Public%20Documents/Administrative%20Directive%20No%204.pdf
- ⁴⁵ American Society of Military Comptrollers. "CDFM Modules" http://www.asmconline.org/certification/cdfm-modules/
- ⁴⁶ American Society of Military Comptrollers. "CDFM Brochure" http://www.asmconline.org/wp-content/uploads/CDFMBrochure2013(1).pdf
- ⁴⁷ American Society of Military Comptrollers. "The CDFM Program" http://www.asmconline.org/certification/cdfm-information/ 13 January 2016.
- ⁴⁸ American Society of Military Comptrollers. "CDFM Brochure" http://www.asmconline.org/wp-content/uploads/CDFMBrochure2013(1).pdf
- ⁴⁹ Government Accountability Office, GAO-14-576T "DoD Financial Management: Effect of Continuing Weaknesses on Management and Operations and Status for Key Challenges" 13 May 2014.
- ⁵⁰ Boyd, David T, Sanithia Boyd. "A Primer for Accounting Certification: Complete Analysis of the Process with a Listing of Sources" *American Journal of Business Education*. October 2009.
- ⁵¹ Government Accountability Office, GAO-14-94 "DoD Financial Management: "Actions Under Way Need to be Successfully Completed to Address Long-Standing Funds Control Weaknesses" April 2014.
- ⁵² Government Accountability Office, GAO-14-94 "DoD Financial Management: "Actions Under Way Need to be Successfully Completed to Address Long-Standing Funds Control Weaknesses" April 2014.
- ⁵³ Leath, James (Air Force Audit Agency, Offutt AFB- Auditor). Interview with Author 5 Jan 2016 and Berry. Rene (Air Force Audit Agency-Auditor) Interview with Author 8 Jan 2016.
- ⁵⁴ Leath, James (Air Force Audit Agency, Offutt AFB- Auditor). Interview with Author 5 Jan 2016.
- ⁵⁵ Berry. Rene (Air Force Audit Agency-Auditor) Interview with Author 8 Jan 2016.
- ⁵⁶ Leath, James (Air Force Audit Agency, Offutt AFB- Auditor). Interview with Author 5 Jan 2016.
- ⁵⁷ Speer, Robert M. Acting Assistant Secretary of the Army, Financial Management and Comptroller Testimony to United States Senate Committee on Homeland Security and Government Affairs 13 May 2014
- ⁵⁸ Hale, Robert, Under Secretary of Defense, Chief Financial Officer. Testimony to United States Senate Committee on Homeland Security and Government Affairs. 13 May 2014
- ⁵⁹ Government Accountability Office, GAO-13-123 "DoD Financial Management: "Ineffective Risk Management Could Impair Progress Toward Audit Ready Financial Statements" August 2013.
- ⁶⁰ Morin, Jamie Dr. Assistant Secretary of the Air Force, Financial Management and Comptroller. Testimony to United States Senate Committee on Homeland Security and Government Affairs. 13 May 2014.
- ⁶¹ Coe, Martin and John Delaney. "The Impact of Certifications on Accounting Education" *Strategic Finance*. July 2008.

Bibliography

American Institute of Certified Public Accountants (AICPA) "Statement on Standard for Continuing Professional Education Program Credits," Accessed 10 January 2016. http://www.aicpa.org/Advocacy/State/DownloadableDocuments/AICPA-NASBA-Final-CPE-Standards.pdf.

American Institute of Certified Public Accountants. "Uniform CPA Examination FAQs - Content, Structure, and Delivery," Accessed 18 January 2016.

http://www.aicpa.org/BecomeACPA/CPAExam/ForCandidates/FAQ/Pages/computer_faqs_2.as px.

American Institute of Certified Public Accountants (AICPA). "Uniform CPA Examination Passing Rates," Accessed 18 January 2016.

http://www.aicpa.org/BecomeACPA/CPAExam/PsychometricsandScoring/PassingRates/DownloadableDocuments/PassRates2015.pdf.

American Institute of Certified Public Accountants (AICPA). "Uniform CPA Examination Purpose and Structure," Accessed 18 January 2016.

http://www.aicpa.org/BecomeACPA/CPAExam/ExamOverview/PurposeandStructure/Pages/default.aspx 18 January 2016.

American Institute of Certified Public Accountants (AICPA) "Why Audit Quality is Important for Auditees," Accessed 4 January 2016.

 $\underline{http://www.aicpa.org/InterestAreas/GovernmentalAuditQuality/Resources/AuditeeResourceCenter/Pages/WhyAuditQualityisImportantforAuditees.aspx.}$

American Society of Military Comptrollers. "CDFM Brochure," Accessed 13 January 2016. http://www.asmconline.org/wp-content/uploads/CDFMBrochure2013(1).pdf.

American Society of Military Comptrollers. "The CDFM Program," Accessed 13 January 2016. http://www.asmconline.org/certification/cdfm-information/.

American Society of Military Comptrollers. "CDFM Modules," Accessed 13 January 2016. http://www.asmconline.org/certification/cdfm-modules/.

Berry, Rene (Air Force Audit Agency) interview by author 8 Jan 2016.

Boyd, David T, Sanithia Boyd. "A Primer for Accounting Certification: Complete Analysis of the Process with a Listing of Sources," *American Journal of Business Education*. October 2009.

Business Executives for National Security "Achieving Audit Readiness in the DoD: A Cautionary Tale from the Air Force," Accessed 7 Jan 2016. http://www.bens.org/document.doc?id=251.

The Budget Control Act of 2011, Public Law 112-25, 112th Congress, Congressional Research Service, Library of Congress. 5 January 2011.

CFO Act 1990, Public Law 101-576, 101st Congress, Congressional Research Service, Library of Congress. 15 November 1990.

Coe, Martin and John Delaney. "The Impact of Certifications on Accounting Education," *Strategic Finance*. July 2008.

Cory, Suzanne and Thomas Huttenhoff. "Perspectives of non-public accounting education and certifications: An exploratory investigation," *Journal of Finance and Accountancy*. May 2011.

Defense Financial and Accounting Service. "DoD Financial Management Certification Whitepaper," www.dfas.mil/dms/dfas/careers/pdf/DoDFMCertificationProgram.pdf.

Girthoffer, Genelle (Lyman-Richie Corporation), interview by author, 31 Dec 2015.

Government Accountability Office, GAO-10-1059T "Financial Management Improvement and Audit Readiness Efforts Continue to Evolve," 29 Sept 2010.

Government Accountability Office, GAO-13-123 "DoD Financial Management: "Ineffective Risk Management Could Impair Progress Toward Audit Ready Financial Statements," August 2013.

Government Accountability Office, GAO-14-94 "DoD Financial Management: Actions Under Way Need to be Successfully Completed to Address Long-Standing Funds Control Weaknesses," April 2014.

Government Accountability Office, GAO-14-576T "DoD Financial Management: Effect of Continuing Weaknesses on Management and Operations and Status for Key Challenges," 13 May 2014.

Hale, Robert, Under Secretary of Defense, Chief Financial Officer. Testimony to United States Senate Committee on Homeland Security and Government Affairs. 13 May 2014.

Institute of Internal Auditors. "Certified Internal Auditor Exam Syllabus," Accessed 25 January 2016 https://na.theiia.org/certification/cia-certification/Pages/Exam-Syllabus.aspx.

Institute of Internal Auditors "Six Steps to Certification," Accessed 19 January 2016. https://na.theiia.org/certification/new/Pages/Six-Steps-to-Certification.aspx.

Institute of Internal Auditors. Global Certification Department. "Administrative Directive Number 4," CPE and CPD Requirements for All Certifications and Qualification Programs. August 2015.

https://na.theiia.org/certification/Public%20Documents/Administrative%20Directive%20No%204.pdf.

Institute of Managerial Accountants. "CMA Brochure," Accessed 18 January 2016. http://www.imanet.org/docs/default-source/cma-lib/cma_brochure_2015.pdf?sfvrsn=2.

Institute of Managerial Accountants. "CMA Examination. Summary Pass Rates 2015," Accessed 18 January 2016. http://www.imanet.org/docs/default-source/cma-lib/2014-09 pass rates 1-5-16 (worldwide).pdf?sfvrsn=2.

Keeley, Mark. Department of Defense Audit Impediments and Audit Readiness Testimony. 17 November 2011.

Leath, James (Air Force Audit Agency). Interview by author 5 Jan 2016.

Morin, Jamie Dr. Assistant Secretary of the Air Force, Financial Management and Comptroller. Testimony to United States Senate Committee on Homeland Security and Government Affairs. 13 May 2014.

National Association of State Boards of Accountancy. "120/150 Hours Draft as of November 2008," Accessed 18 January 2016. https://www.nasba.org/blog/2008/11/04/110408-120150-hour-draft-as-of-november-2008/.

National Association of State Boards of Accountancy. "CMA Brochure," Accessed 18 January 2016. http://www.imanet.org/docs/default-source/cma-lib/cma_brochure_2015.pdf?sfvrsn=2.

Office of the Under Secretary of Defense (Comptroller) "Budget Request Overview," Accessed 4 Jan 2016.

http://comptroller.defense.gov/Portals/45/documents/defbudget/fy2016/fy2016_Budget_Request_Overview_Book.pdf.

Office of the Under Secretary of Defense (Comptroller). DoD Financial Management Workforce Development. Accessed 4 Jan 2016. http://www.asmconline.org/wp-content/uploads/2015/06/87-Clay.pdf.

Office of the Under Secretary of Defense (Comptroller). DoD Financial Management Certification Program Handbook. May 2014.

Sinclair, Renee. "A Study of the Scarcity of Qualified Applicants for Governmental Accounting Positions," 19 January 2015.

Speer, Robert M. Acting Assistant Secretary of the Army, Financial Management and Comptroller Testimony to United States Senate Committee on Homeland Security and Government Affairs. 13 May 2014.

